

REMARKS

Entry of the foregoing amendments to the application is requested on the grounds that the claims, as amended, patentably distinguish over the cited art of record or, alternatively, place the application in better condition for appeal. The claims more particularly point out and distinctly claim the subject matter which Applicants regard as the invention. No new issues have been added which would require further consideration and/or search, nor has any new matter been added. The claims as amended are believed to avoid the rejections applied in the Final Office Action for reasons set forth more fully below.

The Final Office Action of June 19, 2007 has been received and carefully reviewed. It is submitted that, by this Amendment, all bases of rejection and objection are traversed and overcome. Upon entry of this Amendment, claims 1, 4-10 and 26-29 remain in the application. Reconsideration of the claims is respectfully requested.

The Examiner objected to claims 1 and 29 because of the use of the term “three-dimensional structure.” The term has been amended in both claims to “three-dimensional object” as the Examiner requested. It is submitted that the objection is now obviated.

Claims 1 and 4-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Van der Zel (WO 02/085241) in view of Jagmin (U.S. Patent No. 5,044,955). Claim 26 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Van der Zel in view of Jagmin, as applied to claims 1 and 4-10 above, and further in view of Zhong (U.S. Patent No. 6,676,987). Claims 27 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Van der Zel in view of Jagmin, as applied to claims 1 and 4-10 above, and further in view of Berman (U.S. Patent No. 5,071,503). Claim 29 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Van der Zel in view of Jagmin, as applied to claims 1 and 4-10 above, and further in view of Cawley et al. (U.S. Patent No. 5,779,833).

Applicant’s invention as defined in the presently pending claims recites a method of producing a three-dimensional object with an identifiable structure formed within it, the method comprising the steps of disposing combinations of a build material and a contrast enhancing material using at least one ink-jet printhead. The identifiable structure is detectable using a non-invasive dimensional imaging device.

Although Van der Zel teaches procedures for using solid freeform fabrication for making artificial teeth, it teaches nothing about using the procedures for laying down an identifiable structure in the tooth which is detectable with a non-invasive dimensional imaging device. Jagmin teaches nothing about solid freeform fabrication, only about inserting an identity tag in a real tooth during a routine filling of a cavity. The combination of the two references neither teaches nor suggests a way to lay down an identifiable structure which is detectable with a non-invasive dimensional imaging device. Furthermore, it is submitted that someone with ordinary knowledge of solid freeform fabrication, such as is taught by Van der Zel, would not know how to achieve such an object. The materials necessary to achieve such an identifiable structure would not readily be converted to a form which could be laid down through solid freeform fabrication means. Nothing taught or suggested in Van der Zel, Jagmin, Zhong, Berman or Cawley would teach such an object.

Submitted with this response is a Declaration Pursuant to 37 C.F.R. § 1.132 from Isaac Farr who is a colleague of the present inventor and who has years of experience in solid freeform fabrication technology, inkjet technology and the implications of combining the two technologies. In the Declaration, Mr. Farr states that the combination of Van der Zel and Jagmin does not teach or suggest how to achieve an identifiable structure in a solid freeform fabricated tooth using only the methods of solid freeform fabrication combined with inkjet, as used in the present application. Mr. Farr further states that such methods demand an expertise that routine experimentation by an ordinarily skilled artisan in the solid freeform fabrication field would not be able to achieve.

For all the reasons stated above, it is submitted that Applicant's invention as defined in independent claim 1, as well as in those claims depending ultimately therefrom, is not anticipated, taught or rendered obvious by the cited references, either alone or in combination, and patentably defines over the art of record.

In summary, claims 1, 4-10 and 26-29 remain in the application. It is submitted that, through this Amendment, Applicant's invention as set forth in these claims is now in a condition suitable for allowance. Should the Examiner believe otherwise, it is submitted that the claims as amended qualify for entry as placing the application in better form for appeal.

Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, the Examiner is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

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